



## ANALYTICS FOR LEARNING: FINDING MEANING IN THE METRICS

### PROGRAM

DAY 1 - THURSDAY 28 <sup>TH</sup> NOVEMBER			
9am	<b>Registration &amp; Morning Tea</b>		
10am	<b>ALASI24 Opening</b>		
10:30am	<p><b>The Great Learning (Analytics) Debate</b>  <i>"Educational institutions have lost sight of the 'learning' in learning analytics"</i></p> <table style="width: 100%; border: none;"> <tr> <td style="width: 50%; border: none;"> <b>FOR</b>            Lisa-Angelique Lim (UTS)            Yige Song (UniMelb)            Yi-Shan Tsai (Monash)         </td> <td style="width: 50%; border: none;"> <b>AGAINST</b>            Dawn Gilmore (UniMelb)            Arslan Azad (UniSA)            Marion Blumenstein (Auckland)         </td> </tr> </table>	<b>FOR</b> Lisa-Angelique Lim (UTS) Yige Song (UniMelb) Yi-Shan Tsai (Monash)	<b>AGAINST</b> Dawn Gilmore (UniMelb) Arslan Azad (UniSA) Marion Blumenstein (Auckland)
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12pm	<b>Lunch</b>		
1pm	<p><b>Interactive Workshops</b>            PolyFeed: A Feedback Analytics Solution to Scaffold Feedback Literacy for Students and Teachers  <i>Yi-Shan Tsai, Bhagya Maheshi, Flora Jin, Hiruni Palihena, Roberto Martinez-Maldonado, Sadia Nawaz, Guanliang Chen, &amp; Dragan Gašević – Monash University</i></p> <p>or</p> <p>Considering the perspectives of academic staff and other stakeholders in development of a learning analytics implementation plan  <i>Hazel Jones - ASCILITE</i></p>		
2:30pm	<b>Afternoon Tea</b>		
3pm	<p><b>Interactive Workshops</b>            GenAI and Graduate Competencies: Examining the Role of Learning Analytics  <i>Antonette Shibani - University of Technology Sydney</i></p> <p>or</p> <p>Co-designing the Teaching Curve  <i>Dawn Gilmore, Chinh Nguyen, &amp; Yuvraj Mahendru – University of Melbourne</i></p>		
4:30pm	<b>Day 1 Wrap up &amp; Ideation Session</b>		
5pm to 7pm	<b>Poster/Demo Reception</b>		

## **PolyFeed – A Feedback Analytics Solution to Scaffold Feedback Literacy for Students and Teachers**

*Yi-Shan Tsai, Bhagya Maheshi, Flora Jin, Hiruni Palihena, Roberto Martinez-Maldonado, Sadia Nawaz, Guanliang Chen, and Dragan Gašević – Monash University*

Effective feedback is widely acknowledged as having a large impact on student learning experience and success. Key to this is good feedback literacy that enables students to make sense of feedback and act on it. On the other hand, feedback literate teachers can design and facilitate feedback in ways that support students to make evaluative judgement to improve learning. However, there is limited understanding of learner interactions with feedback, thus posing a difficulty to enhance feedback literacy for both students and teachers. We propose to address this gap using a learning analytics-based feedback management system (feedback analytics), PolyFeed, to capture, analyse, and present data about feedback activities. This workshop will introduce concepts of feedback analytics, invite participants to experience feedback analytics through using PolyFeed, and reflect on the opportunities, risks, and future directions regarding feedback analytics.

## **Considering the perspectives of academic staff and other stakeholders in development of a learning analytics implementation plan**

*Hazel Jones - ASCILITE*

Whilst academic staff are a key group of stakeholders in the use and application of learning analytics (LA), to date, their use and interpretation of LA has not been a major research focus. Levels of academics' uptake of use of learning analytics have remained low at many institutions, indicating that LA research has not yet translated into practice. The PhD study on which this interactive workshop is based, bridged the research-practice nexus through the development of a LA implementation plan that was trialled at one university and has the potential to be adapted for other institutions. Workshop participants will be introduced to findings from the study, including: (1) the design of a learning analytics implementation plan to enhance individual academics' knowledge of learning analytics, and their competence and confidence in the use of this knowledge, enabling them to understand and enhance students' learning experience, (2) a set of transferable design principles developed using a design-based research approach based upon analysis of the LA implementation plan and its impacts, allowing for adaptation and adoption in broader contexts. The perspectives of a range of stakeholders will be considered, and participants will discuss the benefits of including all stakeholders in the design and development of an implementation plan in their own context.

## **GenAI and Graduate Competencies: Examining the Role of Learning Analytics**

*Antonette Shibani - University of Technology Sydney*

Generative AI (GenAI) has significantly transformed education, reshaping how students learn and teachers teach. While learners are increasingly using GenAI to support their studies and writing, not everyone has the competencies to work with it effectively and may be offloading too much to AI. Effective use of AI in education requires equipping students with the skills to critically engage with AI as a tool to augment their learning, not hinder it. However, individual differences in students' attitudes, prior knowledge, learning, and engagement mean one size doesn't fit all for instruction and support. We aim to examine the role of Learning Analytics (LA) in supporting future graduate competencies and identifying new competencies graduates need to thrive in the GenAI era. The session will use scenario-based discussion to explore how LA can support ethical and effective AI use, focusing on individual learner empowerment and skill development in writing. Participants will collectively reimagine the future of writing and assessment, emphasizing the importance of maintaining academic integrity and enhancing learning outcomes through responsible AI use.

## **Co-designing the Teaching Curve**

*Dawn Gilmore, Chinh Nguyen, & Yuvraj Mahendru - University of Melbourne Online*

This interactive workshop will engage participants in co-designing a Teaching Curve, a tool leveraging learning analytics to measure and improve teacher presence in online learning. Responding to research that highlights the need for actionable insights, participants will collaborate to evaluate existing models and develop effective metrics for assessing online teacher presence. The workshop will start with live demonstrations on creating and applying a teaching curve, followed by group activities focused on refining metrics and designing practical applications for the tool. This work is important for a university embarking on a new approach to online learning, in particular how to use data to scale and deliver online teaching capability.



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DAY 2 - FRIDAY 29 <sup>TH</sup> NOVEMBER	
9am	<b>Registration</b>
9:30am	<b>Opening Session - Tackling the Big LA Questions</b> (including Morning Tea)
10:30am	<b>Interactive Workshops</b> Collaborative Causal Modelling <i>Ben Hicks - University of Technology Sydney</i> or <i>Leveraging Dispositions towards Learning: A Data-Driven Intervention</i> <i>Erika Spray &amp; James Goulding - University of Newcastle</i>
12pm	<b>Lunch</b>
1pm	<b>Interactive Workshops</b> Exploring participatory narrative coding for theory-informed learning analytics for belonging <i>Lisa-Angelique Lim &amp; Simon Buckingham Shum - University of Technology Sydney</i> or Analytics of assessment choice and feedback <i>Laura Tubino - Deakin University</i>
2:30pm	<b>Closing Session</b>
3pm	ALASI End

## **Collaborative Causal Modelling**

*Ben Hicks - University of Technology Sydney*

Causal claims within education are typically made within an experimental framework, such as Randomised Control Trials, from experimental data rather than observational data. For Learning Analytics (LA) to be actionable causal claims must be made from observational data; to take a well-informed action implies we understand some causal effect based on the data we observe in a learning system. One way to make causal inferences from observational data is through the use of graphical causal models. Whilst the simple graphical representation of the models facilitates collaboration the models' rigorous mathematical foundation requires principled scientific thinking about the system. This interactive session will introduce participants to drawing such graphical causal models, using them to think about the causal assumptions underlying your LA system, and utilising the causal structure to identify and minimise potential bias in order to make stronger scientific claims.

## **Leveraging Dispositions towards Learning: A Data-Driven Intervention**

*Erika Spray & James Goulding - University of Newcastle*

This research-informed workshop presents for discussion the implementation of an interventional trial which forms part of a wider program of research into university students' dispositions towards learning. Dispositional surveys conducted over the past three years, involving approximately two thousand participants, have generated data enabling detailed understanding of how a range of dispositional attributes relate to each other and to students' learning in higher education. Analyses of multiple samples have yielded consistent dispositional factors and predictable participant clusters. These findings served as the foundation for the present study, in which, for the first time, participants received individual reports of their own dispositional individual data, offering them new insight into their learning. Students' interpretation of their data was supported by concise explanations about how dispositional attributes may influence learning at university, information about different types of support, and invitations to tailored workshops designed to teach targeted study strategies. Initial student evaluation has been positive, yet there remains scope for refinement. The project has ethics in place for deployment at other institutions, so methods and materials will be shared with a view to developing future cross-institutional collaboration.

## **Exploring participatory narrative coding for theory-informed learning analytics for belonging**

*Lisa-Angelique Lim & Simon Buckingham Shum - University of Technology Sydney*

This proposal is for a 90-minute interactive workshop. In this session, we introduce an innovative approach to measure student belonging. Belonging is recognized as an important affective dimension of the student experience, however, it is challenging to measure, given its complexity and dynamic nature. The objectives of this workshop are: to understand how narratives can be useful for understanding complexity; and to understand how to employ participatory narrative coding with Cynefin Co's SenseMaker® platform as a way to gain insights into complexity, with belonging as an example. Participants will be involved in discussions as well as hands-on activities to experience the usefulness of narratives and the importance of theory-guided participatory narrative coding. The workshop will conclude with a discussion on the strengths and limitations of participatory narrative coding and how they might use this approach in their own area of research.

## **Analytics of assessment choice and feedback**

*Laura Tubino - Deakin University*

The shift from focusing on feedback to feedback literacy holds significant potential to enhance educational practices. However, to develop and evaluate pedagogical models and technologies that effectively foster and support feedback literacy, it is crucial to analyse the levels of feedback literacy students exhibit within their learning contexts. In this workshop we will focus on exploring feedback literacy using learning analytics to inform teaching practices. Participants will engage with data collected from OnTrack, an assessment management system that facilitates formative feedback and feedback dialogues, supporting students to develop various aspects of feedback literacy. The session begins with an introduction to key feedback literacy frameworks and metrics. Participants will then collaborate in group activities to analyse sample data and generate exploratory questions, followed by whole-group discussions to reflect on actionable insights and address challenges such as incomplete datasets. Designed for educators, researchers, and practitioners, the workshop will provide hands-on experience in applying learning analytics to improve teaching practices and valuable insights into measuring and supporting feedback literacy.